



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/816,082

03/31/2004

Edward K. Y. Jung

SE1-0012-US

9452

80118 7590 11/06/2009
Constellation Law Group, PLLC
P.O. Box 220
Tracyton, WA 98393

EXAMINER

HUYNH, NAM TRUNG

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

11/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	Application No. 10/816,082	Applicant(s) JUNG ET AL.	
	Examiner NAM HUYNH	Art Unit 2617	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 13 October 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617

Continuation of 11. does NOT place the application in condition for allowance because:

Regarding claim 1, Applicant submits that the combination of Mulgund and Warneke does not teach or suggest transmitting one or more mote-addressed content indexes wherein the mote-addressed content indexes include(s) a mote-addressed sensing index or a mote-addressed control index. The Examiner respectfully disagrees. Mulgund teaches that a database server interrogates a sensing node to retrieve the Node Data Table, wherein the Node Data Table contains information about the type of sensor data known to originate at that node (paragraph 42). Based on this citation, the limitation "transmitting" is taught because the sensor node transmits the Node Data Table to the database server in response to an interrogation.

The limitation "sensor-addressed control index" is rendered by the Node Data Table because of the following reasons:

- 1) it is "sensor-addressed" because an identifier of the node is included (i.e. Node A, B, or C) in the table
- 2) it is a "content index" because it contains "contents" such as the type of sensor data known to originate from the node and is in the form of a table which is equivalent to an "index"

The Node Data Table also renders a sensor-addressed sensing index because of the following reasons:

- 1) it is "sensor-addressed" because an identifier of the node is included (i.e. Node A, B, or C) in the table
- 2) it is a "sensing index" because it contains information pertaining to the type of sensor data, or sensing information, in the form of a table which is equivalent to an "index"

In Mulgund, the Node Data Table is transmitted from the sensor node to the database server. The Node Data Table is interpreted by the Examiner as both a sensor-addressed content index and a sensor-addressed sensing index as explained above. Therefore the Examiner submits that Mulgund teaches "transmitting one or more sensor-addressed content indexes wherein the sensor addressed content index includes a sensor-addressed sensing index".

Mulgund additionally teaches that the sensing nodes comprise computational devices possibly ranging in complexity from small embedded platforms to fully-fledged PCs (paragraph 26), which shows that the invention of Mulgund is not limited to the type device used as a sensing node. However, Mulgund does not explicitly recite that the Node Data Table, or addressed content indexes, are transmitted by motes or that the sensing nodes are in fact motes. Warneke cures this deficiency in because Warneke teaches that motes are millimeter scale sensing and communication platforms (page 1, lines 1-8). Based on this definition or teaching, a mote may be considered as a "sensing node" and thus the combination of Mulgund and Warneke is the sensor network of Mulgund which utilizes motes as the sensing nodes, taught by Warneke, which renders the subject claim limitations.

In response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation is found in the secondary reference Warneke on page 1, lines 8-11 which recites that motes are built from integrated circuit and micro-machining processes for low cost, low power consumption, and small size.

Regarding claims 2 and 13, Applicant submits that the combination of Mulgund and Warneke does not teach "transmitting at least a part of one or more mote-addressed content indexes further comprises: transmitting at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index, the at least one of the mote-addressed sensing index or the mote-addressed control index including at least one of a sensing information or a control information other than data collected by a mote". The Examiner respectfully disagrees. In the combination of Mulgund and Warneke, the mote-addressed content index and mote-addressed sensing index is rendered by the Node Data Table transmitted by a mote. The Node Data Table contains the type of sensor data known to originate from the node (Mulgund paragraph 42). The type of sensor data renders "sensing information" because it is information regarding the sensor.

Regarding claims 3 and 14, Applicant submits that the combination of Mulgund and Warneke does not teach transmitting at least a part of one or more mote-addressed content indexes further comprises: transmitting at least a part of a mote-addressed routing/spatial index. The Examiner respectfully disagrees. Mulgund teaches that the database server can retrieve a Links Table which contains Node Addresses identifying the nodes at each end of each link is also collected or obtained from the sensing nodes (paragraphs 38, 61). The Links Table renders a routing/spatial index because it shows interconnectivity between the sensors (i.e. how they are connected with respect to each other).

Regarding claims 4 and 15, Applicant submits that the combination of Mulgund and Warneke does not explicitly teach transmitting at least a part of one or more mote-addressed content indexes further comprises: transmitting at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index, the at least one of the mote-addressed sensing index or the mote-addressed control index including at least one of: a sensing information or a control information other than data collected by a mote and including at least one of: a format used to query one or more devices contained within a mote, a control function associated with one or more devices contained within a mote, or a feedback format associated with a feedback provided by one or more devices contained within a mote. The Examiner respectfully disagrees. Mulgund teaches that the Node Data Table defines the type of information for which the sensor provides (paragraph 42). This information renders a "control function associated with one or more devices contained within the mote" because the information

defines how the sensor is controlled (i.e. a temperature sensor is controlled to measure temperature type data). The information would also describe how the components, or one or more devices contained within the mote, are controlled.

Regarding claim 12, the claim remains rejected for the reasons set forth regarding claim 1.

Regarding claim 23, the claim remains rejected for the reasons set forth regarding claim 1. In addition, Warneke teaches that each mote consists of a communication transceiver (page 1, lines 6-9). This transceiver renders a "transmitting means" and because the transceiver is within the mote, it is considered to be "proximate".

Regarding claim 24, the claim remains rejected for the reasons set forth regarding claim 1.